ASBESTOS

SEPTEMBER, NINETEEN THIRTY-FIVE

..ASBESTOS..

A MONTHLY MARKET JOURNAL DEVOTED TO THE INTERESTS OF THE ASBESTOS AND MAGNESIA INDUSTRIES

A. S. ROSSITER, *EDITOR*

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Asbestos Used in Oyster Research

By R. G. Skerrett

Editor's Note: Articles like this one, covering the use of asbestos in some particular industry, are being published in "ASBESTOS" from time to time to show the diversity of ways in which asbestos affects our daily lives.

This is not a vitally important use perhaps, nor does it consume many tons of asbestos in a decade, but it is in just these small, concealed places that asbestos permeates all industry.

How long shall we have oysters in our accustomed abundance? And the answer is: Not much longer unless urgently needed steps are taken promptly to replenish the beds upon which these marine creatures can thrive.

There was a time when the oyster flourished in our coastal waters from Maine southward to the point where Texas adjoins the mouth of the Rio Grande. Today, because of man's unheeding way of harvesting without taking proper steps to replenish, many of the beds that once yielded plentifully are now virtually denuded. Indeed, the situation has changed radically for the worse within the last twenty-five years; and the volume of marketed oysters has dropped more than 33-1/3 per cent within that period.

A very large part of the oyster-consuming populace has no conception of the economic importance of the oyster industry. People generally look upon it as a salt-water organism that nature provided and which nature always will continue to provide in undiminished quantities — the prevailing theory being that man can harvest all he wants of them and that nothing is required on his part to maintain the natural balance, so to speak. This conception is a dangerously erroneous one.

In the prosperous years of the industry, growers and fishermen harvest and market about 30,000,000 bushels of oysters; and it has been authoritatively stated that none of our other fisheries exceeds the oyster fishery in value. The gathering of 30,000,000 bushels represents compensation to the fishermen totaling something like $15,000,000.

Approximately 60-odd thousand persons are employed, and their annual wages amount to quite $10,000,000. Property used in the business, such as boats,

dredging apparatus, and shore plants represent an investment of substantially $17,000,000. These figures indicate in a general way the importance of this field of human endeavor.

The oyster is not to be looked upon as merely an appetizer served in the form of a cocktail — it is a very desirable foodstuff and capable of providing generously certain essentials of a balanced diet. Dieticians have ascertained that the oyster closely resembles milk in the number and the percentage of its nourishing components; and latterly the experts have discovered that the bivalve

One of a numerous type of dredge boats capable of harvesting four or five hundred bushels of oysters daily.

contains highly helpful vitamin C. This vitamin offsets common dependence upon a diet consisting wholly of cooked food. The oyster should be eaten raw to make the most of its vitamin C content.

The story of the oyster is an exceedingly interesting one in its manifold phases, but for the present purpose we shall have to confine ourselves to telling of a certain very significant laboratory work that has to do with the problem of replenishing our oyster grounds so that we need not fear a shortage in the years to come. The U. S. Bureau of Fisheries has done extremely valuable work in this direction during the last few years; and, in the light of that bureau's researches, much has been learned about the oyster as a living creature. It has very definite requirements that must be met if the oyster is to reproduce itself and then grow to a size and condition that will make it marketable.

Left to its own devices, the oyster will not thrive in

muddy waters where it may be buried beneath a blanket of silt. Furthermore, oysters will not survive in waters that are polluted in various ways. The oyster will certainly die if it be denied sufficient oxygen. Without a proper supply of oxygen, the muscular action of the oyster becomes so impaired that the creature is not able to keep up a number of vital processes and when this condition arises the oyster soon perishes.

Dr. Paul S. Galtsoff, Chief Biologist of the U. S. Bureau of Fisheries, has determined to a nicety in the laboratory just how much oxygen a normal oyster requires. This ingenious scientist has devised simple but effective apparatus for measuring an oyster's consumption of oxygen and, at the same time, learning how various degrees of oxygen deficiency affect the oyster—thus ascertaining the minimum upon which the oyster can just live. To make his findings precise, Doctor Galtsoff had to have sea water of a known oxygen content in which to put his oysters when undergoing investigation, and then to test the water from time to time — the difference in oxygen content indicating the amount consumed by the bivalves.

Organic matter in the sea water, organisms growing on an oyster's shell, etc., consume oxygen; therefore, the oyster shells must be cleaned and the water filtered to exclude all organic matter. The shells were cleaned with wire brushes and coated with paraffin, while the sea water for the experiments was passed thru a ½ inch asbestos filter. With that done, the oxygen content of the sea water could be held constant for a period of 9 hours or more; and, when used for testing, any diminution in the oxygen content could be ascribed definitely to consumption by the oyster or oysters, as the case might be.

The foregoing use of asbestos in the biological laboratory of the U. S. Bureau of Fisheries is only one of several employed by Doctor Galtsoff in determining certain characteristics of the oyster—all of them having to do with the protection and the propagation of the oyster. Thus asbestos is playing an essential part in helping the Government to save a menaced industry—one that concerns nearly all of us.

Raybestos Puts New Brake Relining Equipment on Market

Raybestos has recently placed on the market a new brake relining equipment combination, which consists of a High Speed Drilling and Countersinking Unit and a Pneumatic Riveter. The countersinking unit was designed principally to provide for the high vibrationless speed required to operate the new tapered shank carboloy countersinks with greatest efficiency. Power and speed are abundant and its performance features a wide scope of bands and shoes from the smallest and lightest to the largest and heaviest.

The five carboloy countersinks (two of which come with the unit) are each capable of drilling from twenty to thirty thousand holes in the densest of modern brake linings without resharpening. A countersink sharpening attachment with special grinding wheel may be purchased for this machine.

Compressed Air, having already been proved the best method of riveter operation in major industries, has now been brought to the brake service field by Raybestos. A light touch of the foot on the treadle puts into action a predetermined force with constant riveting pressure at every portion of the stroke, insuring uniform rivet setting regardless of the length of the rivet. It is ruggedly built for heavy duty performance and possesses power and speed for deriveting as well. It operates on air pressure from 80 to 200 lbs., utilizing 1/20 cubic ft. per stroke.

The Best Insulation for Doors

By H. C. Charles

In industrial furnace and oven design insulation plays a very important part. Engineers are working more and more toward the efficiency of the equipment, realizing that upon the proper insulation of the walls, floor and ceiling depends not only the direct efficiency of the furnace or oven in question, but the proximity of production operations in the same room or building.

It is remarkable what progress has been made during the past few years in this respect. Occasionally one can stand close to a furnace side without any sensible indication that a few inches away a temperature of upwards of 1000 degrees exists. The modern bake shop is almost as cool as an ordinary room in which no heat machines are present, so well are they insulated. Not long ago the writer visited a very much modernized heat-treating department of a large manufacturing concern. Altho there were eight large heat-treating furnaces in operation, the temperature of the room was just comfortable with thawing weather without.

Insulation is conserving fuel on every hand to the extent of thousands of dollars annually for industry. It is paying dividends from the first minute the furnace is placed in operation. A satisfactory answer as to why engineers are examining critically the insulation characteristics of various kinds of material.

The present article will deal almost exclusively with door construction as applied to such industrial furnaces. The furnace proper will stand almost unmolested but the door of some furnaces must be opened and shut many times daily. This element of the furnace requires some careful consideration.

The furnace door must be opened and closed with each operation around the furnace and therefore it receives considerable jarring. The vertically sliding door is closed under the action of hand power against the resistance of door weights. The workman brings it down with a bang. If it closes just a little hard the man applies force to loosen it and when once started does not allow

it to stop until it strikes bottom. If it closes easy he gives it a good start and turns away without regard to its slamming shut. We don't know just why human nature tends that way, but a day in the shop convinces us that frail things last but a short time.

Mechanical strength forms the principal consideration in door construction. The insulation in the door must be able to withstand abuses of the nature mentioned, and this is easily within the capacity of asbestos millboard or asbestos fibre. It is often claimed that strength can be obtained by various methods of design such as encasing the insulation in metal, provision for properly tying the metal together clamping the insulation and forming ledges on the inner surface of the sheets to provide vertical rests for the insulating material. This is only possible within certain practical limits. For example, an insulation used vertically must possess sufficient strength

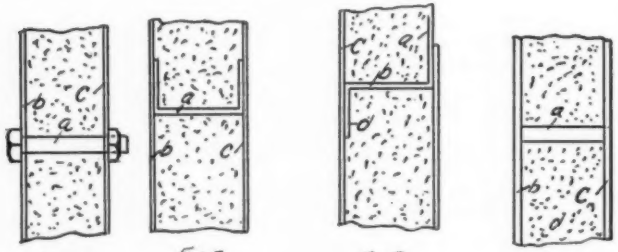

Fig.4 Fig.3 Fig.2 Fig.1

to stand up even where shelving and ties have been provided. If the insulation is subject to spalling or reducing to powder form when vibrations are present in the structure, its effectiveness as an insulation is soon reduced.

Structural difficulties involved in beading metal sheets or forming ledges are well known and expensive. It is also to be remembered that a bead in the sheet reduces the effective thickness of the insulation and for that portion of the structure the insulation value is appreciably reduced. Likewise, connecting members between

the sheets to be of any value as supports must have some width which also increases the thermal conductivity of the wall.

Different methods of tying the two sheets of insulation together are illustrated in the accompanying sketches. In Figure 1 the small round rod (a) is welded between the sheets (b and c) and passes thru the insulation (d). Obviously, this rod has very little vertical support but forms an admirable horizontal support, preventing the sheets from spreading. This method involves drilling a hole thru the insulation for the reception of the rod.

In Figure 2 one sheet (a) has its edge (b) bent at right angles to meet the sheet (c) of the opposite side. The edge of the sheet is also bent downward (as at d) to form a junction between the sheets so that they may be either welded or riveted together. The portion "b" must pass thru the insulation producing a decided break and therefore a metallic connection between the retainer sheets. On the other hand it forms a very good support vertically for the insulation.

In Figure 3 the small channel forms (a) are produced by rolling thin sheets. These forms are then inserted between the sheets (b and c) and held either by riveting or welding in place. Obviously, this method forms a very effective vertical support as well as a tie between the sheets, but like Figure 2 produces a decided increase in the thermal conductivity of the wall.

In Figure 4 bolts (a) are used to tie the retainer sheets together. The same criticism as indicated in connection with Figure 1 is present here.

Tests indicate that a metallic tie between the inner and outer sheets results in almost the same temperature on the outside in the immediate vicinity of such tie as exists on the inside of the oven. For example, if the interior of the oven is 800 deg. F. then the spot surrounding the outer end of the bolt or rod or the strip along the flange will be around 700 deg. F.

The objection to having such hot spots on the outer sheet of the structure is obvious. Such temperatures would result in igniting paper, oily waste and would char wood. There is also the liability of bad burns sustained

by anyone coming in contact with the surface. This is doubly possible due to the fact that the wall is generally comparatively cool elsewhere.

Insulation such as mentioned above as apt to powder, requires such cross ties at numerous places in the wall and particularly in the door. If, however, the insulation is of millboard construction or insulating cement with considerable fibres of asbestos interwoven in the mixture, the mass possesses sufficient shock absorbent qualities to withstand shock. The asbestos fibre reduces the tendency to powder and thus eliminates the necessity of having all the small supports and connectors between the sheets. Just a few such connectors are used with this latter material and these are insulated from the adjacent sheets by a sheet of asbestos.

E. Schaaf-Regelman

Upon publication in August "ASBESTOS" of the date of Mr. E. Schaaf-Regelman's birthday, we were informed by a reader that Mr. Regelman died in Hamburg, Germany, on February 20th, 1935, of heart failure.

We much regret that news of Mr. Regelman's death did not reach us at the time, and while this is rather a late date to mention it in "ASBESTOS" we thought there might be others in the Industry, old friends or contemporaries of Mr. Regelman, who had not heard of his death and would be interested to know of it.

Our readers will remember that Mr. Regelman at one time was greatly interested in Arizona Asbestos and the development of the Arizona deposits.

We understand that applications for patents on a new and useful method of separating asbestos fibres from the natural asbestos rock have recently been filed in the United States Patent Office and expect to have further more definite information in our October number. The method is said to be a radical departure from any method now in use and less expensive to operate than methods at present being used.

Using Asbestos in Breaking of Ice Jams

By F. R. Cozzens

A modern method of controlling floods is to keep streams free of ice jams and other channel obstructions. This is usually done by firing explosive charges at certain points underneath the mass, the common charge being made up of dynamic cartridges held together by floats.

Until recent times, this practice was only partially successful, due to the fact that charges thus placed required immediate firing. Floats often became water logged, thus pulling a charge too low, and there was always the danger of unfired cartridges being blown or washed ashore. Modern engineering skill now tackles the stream clearing job by a three point program and a basic ingredient of each is an asbestos product in some form.

The modern recipe for ice jams is the "ice-bomb," which is made by loading three 11/4x8 inch cartridges of 40% ammonia dynamite in a two foot metal shell. Cartridges are placed side by side, and tightly packed with asbestos fibre, which has previously been oven dried for six hours. An electric blasting-cap is placed in the pack, and the top of the shell is closed by a water-tight lid. Wiring connections are coated by waterproofing compound, containing asbestos, and lead wires are insulated with rubberized-asbestos wrapper. These shells are prepared in advance, and held ready for any emergency. On special occasions, the dynamite is replaced by nitro-glycerine. The usual recipe is one pint per shell. In making the packs, which is a local job, the liquid explosive is poured over the asbestos fibre, and the shell sealed with a rubberized cement. For very light jams, blasting powder, FFF grade, sometimes replaces both dynamite and nitro-glycerine, and the asbestos fibre serves as a dry pack.

It occasionally happens that ice jams occur in isolated districts where ready prepared bombs are not easily obtained. The recourse in such cases is the old time bundle of dynamite cartridges but the pack is improved upon by

first dipping each cartridge in waterproof roofing cement. This also contains asbestos which resists acids formed by the action of explosives in water, and a charge thus treated will remain alive for days. Because of the acid-resisting feature, asbestos cement often replaces the common mud pack in surface shooting.

Practically all explosive charges are lowered into position thru openings drilled thru the ice, and where drilling equipment is not available, the openings are "burned" by means of an asbestos torch. This tool is made from an iron rod, tightly wrapped at one end with asbestos fibre, and soaked in crude oil. This tool is also used in the burning of drift, and various kinds of channel debris.

For maximum results in stream clearing, explosives must be held firmly underneath the obstruction, and here again an asbestos packed shell serves a special purpose because of its lightness in weight. Flotation is easily controlled, and temperature changes are admitted to the enclosed explosive gradually, thus assuring a more accurate blast. More charges can be handled per man at a marked saving of materials, and the menace of inflammable residue is eliminated entirely.

Twenty industries have asked the Federal Trade Commission to sponsor trade practice agreements. Among the twenty is the Asbestos Manufacturing Industry.

It is stated that a majority of these agreements will probably be approved by the end of 1935.

Federal Trade Commission regulations provide that the agreement must have the backing of a majority of the volume of production of the industry involved.

Anyone in the Asbestos Industry wishing to employ salesmen are urged to write us as we often have applications of this kind.

Likewise salesmen who wish positions with asbestos firms are invited to send in their applications and qualifications. Very often we can do both the salesman and the asbestos firm a real service by placing one in contact with the other.

ASBESTOS

ASBESTOS CORPORATION LIMITED

THETFORD MINES

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Ridiculous Statements

Here are two more added to our growing collection of ridiculous statements about asbestos.

The first embodies an idea which seems to be quite prevalent at present, judging from the number of similar references. The item is taken from a newspaper article on a model house being erected in one of the smaller cities. It says: "The ceiling of the second floor is being lined with a four inch thickness of Rock Wool, an effective insulation agency made from limestone *and asbestos.*"

Perhaps the idea comes from the fact that asbestos has in times past been called "mineral flax" or "pierre a coton" (the cotton stone), which, it must be admitted, are not so very different from the term "rock wool." But we hope that all our readers will do their very best to destroy the apparently increasing idea that Rock Wool contains, is made from or actually *is* asbestos.

The second statement appears to be a facetious attempt to make some asbestos statistics interesting. We quote from an article which is appearing in a number of newspapers. Who perpetrated the first act of crime in releasing the article we are unable to learn.

"It isn't every barber shop that grosses nearly five million dollars a year. But that was the 1934 income of the Quebec 'tonsorial parlors' in which modern science and industry shaved 155,000 tons of whiskers from the face of the earth, figuratively speaking. A report on the job, released recently by provincial mining authorities, shows that the Barber of Seville, Delilah who shaved Samson, and Dominick down on the corner, are pikers with their scissors, razors, hot towels and fancy lotions. The picturesque eastern townships section of Quebec finds trimming the mineral whiskers of the world's greatest asbestos mines much more profitable."

This latter statement may be regarded as funny by some of the readers of the aforementioned newspapers, but who wants statistics on asbestos "funny"!

Little Lessons In Selling

PROCRASTINATING PROSPECTS

By John T. Bartlett

Common prospect type in sales experience is the buyer who puts off his decision. He doesn't say, "Yes," and he doesn't say, "No." He is too busy to decide the matter, or wishes to take it up with an associate, or await the outcome of certain events.

As experienced salesmen know, the second call on such a prospect often has the same result as the first. The third call may have the same result. And a fourth, and a fifth!

"When I am given the chance to call again," related a veteran salesman, "I always consider it a favorable outcome. My experience tells me that I have at least a three to one opportunity to land an order.

"In some cases, of course, the prospect has put me off because he is too weak to turn me down. Again I know from experience that, by being persistent, pleasant, obliging, I can so build myself up that, eventually, I take control, and make up the prospect's mind for him.

"In other cases, there are genuine reasons why the prospect isn't in a position to place the order. The fact that he gives me the opportunity to call again shows that he is well-disposed to me. Again, my strategy is to build up, by being patient and good natured. Each visit is a chance to learn more about the prospect and his needs. And if making a sale hinges on high grade salesmanship, I make it."

There comes to my mind a certain buyer who is noted for his habit of putting salesmen off, forcing them to call again and again. He tires out a good many men in this way—seems to take a certain joy in it. However I do not know of a single case in which the salesman who has continued patient and persistent, being willing to make a great many calls, has failed eventually to get business. And I know of other men who, after three or four calls, have taken the situation in hand and with determined salesmanship have put the sale over then and there.

ASBESTOS
MARKET CONDITIONS

General Business.

We quote from the National City Bank letter for September, which bears out our impression of general business improvement:

"The reports from business during August have continued of an encouraging character. Industrial operations, according to preliminary figures, have made more than the usual seasonal advance and markets of all kinds give evidence of a further strengthening of confidence in the fall outlook.

"The persistence and spread of the business improvement over the past nine or ten months, despite both political and economic handicaps, have made a strong impression upon all observers. None of the previous upswings during the depression has extended as widely into the durable goods industries; also, and doubtless for that reason, none has shown such staying power. From the peak of the rise, reached in late winter, the subsequent reaction amounted to only 4 per cent in terms of the Federal Reserve Board's index of industrial production, and now another rise apparently is under way. This supplies an encouraging contrast to the sharp recession which followed every other upward movement. Moreover, business has had to overcome the disturbing influence of the N. R. A., A. A. A., and other court decisions; the continuous apprehensions as to Treasury deficit; and the effects of a series of important legislative enactments, all creating difficulties and new uncertainties.

"Hence the improvement may be accepted as evidence of the strength of the natural powers of recovery, which arise out of the wants of everyone and the desire of everyone to do business; and also of a better balanced economic situation so that these desires can become effective."

Asbestos. Raw Material.

Prices on raw asbestos from all sources are unchanged. Shipments are on the upgrade. Demand—good.

Asbestos. Manufactured Asbestos Products.

Textiles. There is little change in this market at present nor is any expected until industrial activity shows a definite increase. Prices are fairly firm.

Brake Lining. Overshadowing all news in the brake lining and clutch facing division of the Asbestos Industry was the announcement that Raybestos-Manhattan, Inc., has concluded negotiations with Dewey & Almy Chemical Company whereby they have taken over manufacturing equipment, trademarks, goodwill, etc., of the Multibestos Company. The sale does not include the replacement inventory.

Sales of brake lining and clutch facings during July and August in the replacement field continued strong during the summer giving every indication that the greater use of automobiles is beginning to be reflected in improved volume.

Insulation. High Pressure. Very little change in this market nor is any expected until industrial activity becomes more marked. Prices are firm; volume about as usual.

Insulation. Low Pressure. In this market the usual seasonal pickup has already begun but somewhat earlier than usual and in somewhat better quantity than last year. Prices have dropped slightly, particularly in certain sections.

Paper and Millboard. Here again seasonal advance is noted with prices firm.

Asbestos Cement Products. Sales of Asbestos Cement Shingles continued at a very satisfactory rate for the entire industry during the month of August and, due to a steadily increasing demand for the very attractive Asbestos Cement Siding Shingles now on the market, all manufacturers find themselves booked well ahead with orders and what promises to be a very satisfactory fall business.

Certain improvement has been shown in the demand for Asbestos Wallboard as well as the flat and corrugated sheets for industrial purposes.

The above represent the opinions of various men in the Industry closely in touch with the several divisions of the asbestos market. Your ideas are always welcome.

CONTRACTORS AND DISTRIBUTORS PAGE

THE FHA AND INSULATION

Has the FHA benefited the Insulation Industry?

We asked this question in our August number; we also wrote a number of insulation contractors at various points thruout the country and asked the same question.

A fair number of replies (about 25% of those addressed) has been received and the concensus of opinion seems to be that while the insulation business may have benefited indirectly from the FHA and the modernization program, no direct benefits have accrued to the insulation contractors from this movement.

In most cases the report is that the houses being modernized are small and the application of insulation, if any, is done by steamfitters and plumbers who buy the insulation thru supply houses.

Some of the replies received indicate that the FHA movement has started a great deal of modernization work but that this has been so scattered thruout the various trades that the advantages to each trade have been rather small and the results, so far as the insulation contractors are concerned, practically nothing.

Reports from the Federal Housing Administration itself indicate that the amount of modernization work thruout the United States as a result of the modernization program has totalled thousands of dollars; but it must be remembered that this work is scattered over hundreds of communities, towns or cities and when one community or town or city is considered it must be again divided among the various trades such as painting, roofing, heating, plumbing, making the final total of increased work in each trade in each community very little.

Of course this is not true of all communities, and it seems from the replies received that where the building trades in any one vicinity have joined in concerted movement in support of the modernization program at least indirect benefits are reported by the insulation contractors.

Will not other insulation contractors who have not replied to our questions write us their experiences with the modernization or better housing programs?

BUILDING

The construction total for July exceeded the monthly volume reported for any other month since March, 1934, when the PWA

was at its peak. According to F. W. Dodge Corporation the contract total for all classes of construction reported for July in the 37 eastern states amounted to $159,249,900. During June the volume was $148,005,200 while in July of last year the total was only $119,662,300.

The chief item of significance in the July record is to be found in the continued activity in the residential field, as distinguished from other classes of construction. For residential building, the July total amounted to $48,371,800; this was almost 2½ times the volume reported for July, 1934. The residential total for July slipped about 3 per cent from the June contract volume of $49,832,600 but that is less than is customary at this season of the year.

For the first seven months of 1935 residential construction contracts in the 37 eastern states totaled $256,545,400. This is in excess of the total for all of 1934 and compares with a total of only $151,592,500 for the corresponding seven months of last year.

Despite the large improvement in residential work the contract total for all classes of construction covering the first seven months of this year is less than that reported for the corresponding period of 1934. A year ago the total was $973,764,200; this year's total was $855,756,700.

AUTOMOBILE PRODUCTION

Total automobile production for July 1935 was 350,118 (337,049 in the United States and 13,069 in Canada) compared with 377,165 in June (361,320 in the United States and 15,745 in Canada).

In July 1934, 276,047 motor vehicles—264,933 in the United States and 11,114 in Canada—were produced.

Total for the first seven months of 1935 was 2,723,589 (2,599,193 in the United States and 124,396); while for the same period of 1934 the total production was 2,072,394.

In the first quarter of 1935 manufacturers' sales of brake linings and clutch facings showed an increase of 20% over the same period in 1934, according to figures announced by the Brake Lining Manufacturers' Association, Inc. Sales for the first quarter of 1935 were $5,013,800 compared with $4,178,100 in the previous year.

The increase is attributed largely to the increase in automobile production, the buying for which is usually concentrated in the first part of the year.

ASBESTOS

Africa (Rhodesia)

(Statistics published by Rhodesia Chamber of Mines)

	June 1935 Tons (2000 lbs.)	Value
Bulawayo District		
Nil Desperandum (Afr. Asb. Mng. Co., Ltd.)	320.70	£5,066 17 ..
Shabanie (Rho. & Gen. Asb. Corp., Ltd.)	2,769.20	42,744 8 8
Victoria District		
King & Gath's (Rho. & Gen. Asb. Corp., Ltd.)	599.55	8,656 9 8
	3,689.45	£56,467 15 4
June 1934	*2,415.23*	*£30,134 3 5*

Africa (Union of South)

(Statistics published by Dept. of Mines for Union of S. A.)

	April 1934 Tons (2000 lbs.)	Value	April 1935 Tons (2000 lbs.)	Value
Transvaal				
Amosite	240.05	£2,412	351.00	£3,510
Chrysotile	381.60	6,027	1,283.13	11,255
Cape				
Blue	240.19	4,553	223.51	3,787
	861.84	£12,992	1,857.64	£18,552

	June[1] 1934 Tons (2000 lbs.)	Value	June[1] 1935 Tons (2000 lbs.)	Value
Transvaal				
Amosite	309.35	£3,110	341.40	£3,397
Chrysotile	745.20	8,649	1,323.70	12,840
Cape				
Blue	187.99	3,374	176.74	2,992
	1,242.54	£15,133	1,841.84	£19,229

[1]May figures given in the August Number.

Greece

(Figures published by U. S. Dept. of Commerce)

	Year 1932	Year 1933
In Short Tons (2000 lbs.)	680	658

Canada

(Statistics published by Bureau of Mines, Province of Quebec)

	July 1934 Tons (2000 lbs.)	July 1935 Tons (2000 lbs.)
Fibre	12,042	15,398
By-Products (sand, gravel, etc.)	505	526

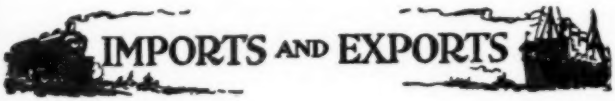
Nothing is easier than finding fault; no talent, no self-denial, no brains, no character are required to set up in the grumbling business.

Asbestos - 1934

The above is the title of a ten page multigraphed pamphlet issued by the Mining, Metallurgical and Chemical Branch of the Department of Trade and Commerce, Dominion Bureau of Statistics, Ottawa, Canada.

This pamphlet covers very thoroly the subject of Asbestos during 1934 and gives various tables, such as Sales and Shipments of Canadian Asbestos by grades; Sales and Shipments of Canadian Asbestos by years from 1925 to 1934 inclusive; Imports into Canada and Exports of Asbestos, 1933 and 1934; Wage Earners Employed; Fuel and Electricity Used; Purchases of Mining and Milling Equipment and General Supplies; Materials Used (quantity and cost) in manufacturing Asbestos Products; Asbestos Products Made; World Production of Asbestos with comments on various of the larger producing countries; and several paragraphs devoted to the uses of asbestos.

We are glad to have this general survey of the Industry.



Imports into U. S. A.

(Figures published by U. S. Dept. of Commerce)

Unmanufactured Asbestos

	June 1934 Tons (2240 lbs.)	June 1935 Tons (2240 lbs.)
Africa (Br. S.)	223	219
Canada	7,171	9,453
Cyprus, Malta & Gozo	179	372
Italy	2	53
United Kingdom	2	....
	7,577	10,097
	$268,079	$354,982

Tabulation of Crudes and Fibres:

Crude (Africa—Br. S.)	223	219
Crude (Canada)	127	101
Crude (Italy)	2	3
Crude (United Kingdom)	2	..
Mill Fibre (Canada)	2,638	3,236
Lower Grades (Canada)	4,406	6,116
Lower Grades (Cyprus, Malta & Gozo)	179	372
Lower Grades (Italy)	.....	50
	7,577	10,097

Manufactured Asbestos Goods:

	June 1934 Value	June 1935 Value
Austria	.....	$1,400
Belgium	$1,112	.....
Canada	119	.....
Germany	1,354	144
United Kingdom	6,347	2,650
	$8,932	$4,194

Exports from U. S. A.

During June 1935, 25 tons of Unmanufactured Asbestos, valued at $7,929, were exported; this compared with 97 tons, value $6,648, in June 1934.

ASBESTOS

Exports of Manufactured Asbestos Goods:

	June 1934		June 1935	
	Pounds	Value	Pounds	Value
Paper, Mlbd. and Rlbd.	75,227	$ 5,056	204,217	$ 9,143
Pipe Covg. and Cement	190,696	8,572	164,928	8,482
Textiles, Yarn and Pkg.	104,753	42,966	97,756	43,703
Brake and Clutch Lining—				
Molded and Semi-molded	.....	56,958	.....	61,306
Not Molded	160,659[1]	24,215	114,767[1]	19,841
Asbestos Roofing	4,792[2]	.....	1,694[2]	9,835
Magnesia and Mfrs. of	581,240	105,109	168,942	14,216
Other Asbestos Mfrs.	41,834	6,629	137,311	15,271

[1]Lin. ft. [2]Sqs.

Exports of Raw Asbestos From Canada

(Figures by Dominion Bureau of Statistics)

	July 1934		July 1935	
	Tons (2000 lbs.)	Value	Tons (2000 lbs.)	Value
United Kingdom	316	$17,375	320	$16,100
United States	3,562	168,564	4,292	219,710
Australia	86	4,210	92	4,500
Belgium	185	11,238	86	2,588
France	195	9,064	321	26,205
Germany	465	33,004	569	48,596
Italy	71	7,685	328	32,276
Japan	409	17,925	383	19,410
Netherlands	.....	.....	44	1,430
Poland	33	1,850	50	2,374
Spain	.....	.....	20	1,000
	5,322	$270,915	6,505	$374,279
Sand and Waste—				
United Kingdom	380	8,235	505	10,765
United States	5,453	81,291	7,079	110,097
Belgium	60	810	197	3,154
Brazil	.....	.....	5	55
France	30	510	30	539
Germany	163	2,598	134	3,018
Netherlands	55	660	30	660
	6,141	$94,104	7,980	$128,288
	11,463	*$365,019*	*14,485*	*$502,567*

ASBESTOS

Imports and Exports by England

Imports of Raw Material:

	July 1934		July 1935	
	Tons (2000 lbs.)	Value	Tons (2000 lbs.)	Value
From Africa (Rhodesia)	858	£15,348	513	£12,613
From Africa (Union of So.)	720	16,334	652	8,740
From Australia	.....	.....	32	454
From British India	.....	.....	3	164
From Canada	233	3,047	766	8,134
From Cyprus	31	543	2	30
From Finland	33	218	..	....
From Soviet Union (Russia)	188	3,627	601	10,099
From U. S. of America	3	86	.....	.....
	2,066	£39,203	2,569	£40,234

Exports of Manufactures:

	July 1934		July 1935	
	Cwts.	Value	Cwts.	Value
To Irish Free State	4,327	£2,631	3,995	£3,276
To British India	5,420	7,948	3,065	6,427
To Australia	837	4,132	1,195	5,476
To Other British Countries	15,117	19,706	10,263	16,708
To Netherlands	1,131	2,882	1,003	3,373
To Belgium	774	3,292	560	3,385
To France	544	2,497	735	3,546
To Italy	330	3,429	370	4,510
To Other Foreign Countries	7,290	28,248	9,545	30,502
	35,770	£74,765	30,731	£77,203

ASBESTOS STOCK QUOTATIONS

			August 1935		
	Par.	Div.	Low	High	Last
Asbestos Corpn. (Com.) New V. T.	np	–	13½	18	15¼
Carey (Com.)	100	–	No Sales		
Carey (Pfd.)	100	6	No Sales		
Certainteed (Com.)	np	–	5¼	6½	6¼
Certainteed (Pfd.)	100	7	44	56¼	55¾
Garlock Packing (Com.)	np	–	No Sales		
Johns-Manville (Com.)	np	–	60⅞	68	66½
Johns-Manville (Pfd.)	100	7	122	128¾	126
Raybestos-Manhattan (Com.)	np	1.00	19	20¾	20¼
Ruberoid (Com.)	np	1	63	68	66
Thermoid (Com.)	np	–	4⅞	5⅞	5½
Thermoid (Pfd.)	100	–	34	48½	48½

NEWS OF THE INDUSTRY

Birthdays. Our birthday list this month contains the following names:

Harold B. Buse, President, Insulations, Inc., Cambridge, Mass., September 20th.

W. N. Bolster, Manager, Asbestos Covg. & Textile Co., Boston, Mass., September 20th.

G. Koerner, President, Insulating & Materials Co., St. Louis, Mo., September 24th.

M. William Bray, Secretary, Mohawk Asbestos Shingle Co., Inc., Utica, N. Y., September 25th.

C. Stanley Morgan, Detroit, Mich., September 25th.

M. J. O'Malley, President, Standard Asbestos Mfg. Co., Chicago, Ill., September 26th.

J. M. High, Ruberoid Company, New York City, N. Y,. September 28th.

O. P. Hennig, President, Hennig Asbestos & Packing Co., Chicago, Ill., October 3rd.

John H. Victor, President, Victor Gasket Mfg. Co., Chicago, Ill., October 9th.

Russell E. Crawford, Secretary, Ehret Magnesia Mfg. Co., Valley Forge, Pa., October 9th.

Thos. D. Stone, President, Stone Industrial Equipment Co., Springfield, Mass., October 14th.

Col. R. F. Massie, D. S. O., President, Asbestos Corporation Limited, Thetford Mines, P. Q., October 15th.

R. J. Evans, Vice Pres. & Gen. Mgr., Asbestos Mfg. Co., Huntington, Ind., October 15th.

To all of these gentlemen we extend best wishes and congratulations.

United States Asbestos Division, Manheim, Pa., has absorbed its subsidiary, the United States Asbestos Company of Illinois and the Chicago Offices and warehouses will in future be operated as a branch of the Division. J. A. Wheatley, who has been district sales manager in Chicago since the first of the year has been promoted to the office of branch manager. Packing and gasket sales will be handled separately from automotive sales under the management of G. L. Hammons, who has been associated with the company for over 25 years.

Walter C. McAlester has been appointed New England branch manager for the United States Asbestos Division as of August 1st.

H. W. Porter & Co., Inc., Newark, N. J., has recently issued its Bulletin No. 352, containing specifications for a complete system of modern steam conduits for the protection and insulation of pipe lines between buildings. H. W. Porter & Co. manufacture Therm-O-Tile Steam Conduit Systems.

Philip Carey Company, Lincoln Building, New York City, announce that L. W. Clarke, formerly with Robert A. Keasbey Company, is now associated with them and has supervision, in the New York area, over sales of Carey Heat Insulating Materials.

Raybestos-Manhattan, Inc. earned net income of $752,360.59 during the six months ended June 30, 1935, equivalent to $1.17 per share, comparing with net income of $719,831.98, or $1.12 per share, during the same period in the year prior.

The balance sheet at June 30, 1935 revealed total assets amounting to $16,837,722.28, including $8,156,505.34 of current assets, equivalent to 9½ times the current liabilities of $844,193.46, at the close of the half year. The Company had no banking or funded debt, or other capital obligations. The book value of its 638,600 shares of stock outstanding, after deducting the 37,412 shares held in the treasury, was $23.62 per share. The net current assets represented $11.45 per share, of which cash and marketable securities amounted to $4.23 per share.

The Directors declared a dividend of 25c per share, payable September 14, 1935 to stockholders of record at the close of business August 30, 1935.

Richard V. Mattison, M. D. Our sincere sympathy is extended to Dr. Richard V. Mattison (Chairman of the Board, Keasbey & Mattison Co., Ambler) on the death of Mrs. Mattison, who passed away on Sunday, August 25th, after a very brief illness.

C. A. Parks, formerly Secretary of the Northwest Magnesia Association, is now connected with the Asbestos Supply Company, Seattle, Wash., in charge of their Contract Department.

G. C. Lingle, P. O. Box No. 328, Globe, Ariz., is at present in charge of the Regal Asbestos Mine which has been closed down for about six years. We understand that Mr. Lingle has some Crude Asbestos for sale.

Raybestos-Manhattan, Inc. has just concluded negotiations with Dewey & Almy Chemical Company of Cambridge, Mass., whereby they have taken over manufacturing equipment, trade marks, goodwill, etc., of the Multibestos Company. The sale does not include the replacement inventory.

Thomas M. Russell

Thomas M. Russell, Chairman of the Board of the Russell Manufacturing Company, Middletown, Conn., died at his home in Middletown on July 30th, at the age of 62.

Mr. Russell was a former mayor of Middletown and has held many public offices.

The company which was founded in 1810, is a large manufacturer of cotton webbing and asbestos brake lining.

PATENTS

Vibration Damping Material. No. 2,008,654. Granted on July 16th to George W. Clarvoe, Somerville, N. J., assignor to Johns-Manville Corporation, New York. Application May 3, 1932. Serial No. 608,913. Description upon request.

Vibration Damping Structure. No. 2,008,655. Granted on July 16th to George W. Clarvoe, Somerville, N. J., assignor to Johns-Manville Corporation, New York. Application February 15, 1932. Serial No. 656,242.

Ring Packing. No. 2,008,682. Granted on July 23rd to George Christenson, Plainfield, N. J., assignor to Johns-Manville Corporation. Application September 19, 1932. Serial No. 633,833.

Described as an oil retaining ring adapted for use in connection with an automobile axle, comprising a body portion and a flexible lip secured at one side to the said body portion, the body portion being adapted to retain the base of the lip in approximately pre-established position, the body portion and lip including each a binder and reinforcing fibres associated therewith and the binder in the lip being more resistant to elevated temperatures and oil than the binder in the said body portion.

Structural Material. No. 2,008,718. Granted on July 23rd to Edward M. Jenkins, Somerville, N. J., assignor to Johns-Manville Corporation, New York. Application July 23, 1932. Serial No. 624,295.

Described as an article of manufacture comprising a strongly compressed and densified mixture of cementitious material adapted to be hardened at atmospheric temperature, reinforcing fibres of the type of asbestos, and a density lowering material that is readily volatile in super-heated steam at a temperature below that which causes weakening of the bond in the cementitious material.

Shrinkable Container Closure. 2,008,778. Granted on July 23rd to Richard Weingand, Bomlitz, Germany, assignor to Sylvania Industrial Corporation, New York, N. Y. Application Sept. 25, 1933. Serial No. 690,794.

Described as an article of manufacture, a shrinkable container closure, formed from vscose solutions and the like, containing asbestos filaments which are aligned with their longest dimensions parallel to the longitudinal axis of the closure, said closure having a smooth surface and a glossy silky lustre in reflected light and being capable of shrinking to a degree substantially equal to that of a cap free of solid fillers.

Underground Conduit. No. 2,009,068. Granted on July 23rd to Harry W. Porter, Maplewood, N. J., and William C. Boren, Jr., Greensboro, N. C. Application October 3, 1934. Serial No. 746,634.

Described as in a tile conduit two tile sections arranged end to end and each having longitudinal openings in its end between opposite faces of the tile section and the end of one tile having

an exterior beveled surface intersecting the openings and forming a space for a mortar joint between the ends of the tile, and mortar in said joint extending into the ends of said openings to lock the mortar in the joint and the two tile sections together.

Moisture Indicator. No. 2,009,760. Granted on July 30th to Richard Brown, Auburndale, and Edwin H. Perry, Worcester, Mass. Application January 10, 1929. Serial No. 331,585.

Described as the combination of two conductors located in a path of air currents, a continuous layer of absorbent asbestos fibre filling the space between the conductors, whereby when the asbestos is moistened a path for a current of electricity will be established thru it from one conductor to the other and the asbestos will be dried out thereby, a source of electric current, one conductor being connected to one terminal of said source, a shunt relay coil and a series relay coil, one terminal of each coil being connected to the other conductor, a pair of separated front contacts, one of said contacts being connected to the other terminal of said shunt coil and to the other terminal of said source of current, the other contact being connected to the other terminal of said series coil and to one terminal of a signal devince the other terminal of signal device being connected to said first terminal of said source of current, a pair of separated back contacts for said coils, one of said back contacts connected to said other terminal of said source and the other back contact being connected to one terminal of a pilot lamp, the other terminal of which is connected to said first terminal of said source of current, a bridging contact member for said pairs of contacts, means movably mounting said bridging member so that it engages said front pair of contacts when the shunt coil is energized due to a wet condition of the asbestos, and the back pair of contacts when the asbestos is dry, the current passing thru the coils and signal device in the latter condition being of insufficient value to lift the bridging member and to operate the signal due to the selected resistance of the elements.

Wick for Oil Burners. No. 2,009,865. Granted on July 30th to Jesse M. Weaver, Charleston, S. C., assignor to Raybestos-Manhattan, Inc., Passaic, N. J. Application July 30, 1932. Serial No. 626,262.

Described as in a wick an elongated body having its longitudinal edges forming its upper and lower edges, said body comprising a flat sheath of braided strands and a strengthening member of fire resistant material in said sheath to support same against collapse.

Paper Machine. No. 2,010,150. Granted on August 6th to James W. Hemphill, Yonkers, N. Y., assignor to Johns-Manville Corporation, New York City. Application April 5, 1934. Serial No. 719,087.

A paper machine comprising a moving member of the type of a Fourdrinier wire having wet paper stock thereover and a plate element disposed below a portion of the said member and

in frictional contact therewith, the said element including a shaped and hardened composition containing toughening fibres and a binder composition therewith, the said sheet being of low coefficient of friction with the said wire.

Wall Structure. No. 2,010,412. Granted on August 6th to Raymond V. Parsons, New York City, assignor to Johns-Manville Corporation, New York City. Application January 29, 1932. Serial No. 589,723.

A wall of minimized tendency to vibrate as a whole comprising a supporting sub-structure, pre-formed, stonelike facing units supported in non-contacting relationship to each other upon the sub-structure, and independent separator members disposed between the edges and adjacent channels closing the joint there between and minimizing the transmission of vibration between adjacent panels.

Apparatus for Forming Shingles. No. 2,010,425. Granted on August 6th to Edward J. Buczkowski, Ambler, Pa. Assignor to Keasbey & Mattison Company, Ambler, Pa., original application December 23, 1930. Serial No. 504,243. Divided and this application October 8, 1932. Serial No. 747,276.

In mechanisms for forming shingles or slabs of asbestos cement composition, the combination with a travelling belt for carrying said composition in strip form, and means for cutting said strip into pre-determined lengths, coloring means and means for varying the supply of coloring to said strip in pre-determined timed relation to said cutting means.

Apparatus for Manufacturing of Cementitious Sheets. No. 2,011,439. Granted on August 13th to Rene Dorn and Martin Willis, New Orleans, La. Application April 28, 1932. Serial No. 607,971.

Apparatus for forming a sheet from pulp, comprising a rigid matrix having the contour and extent of the finished sheet and means independent of said matrix for forming pulp into a layer and applying said layer upon said matrix.

Process for Making Cementitious Sheets. No. 2,011,440. Granted on August 13th to Rene Dorn and Martin Willis, New Orleans, La. Original application April 28, 1932. Serial No. 607,970.

Divided and this application filed March 1, 1933. Serial No. 659,133.

In a process for making structural sheets from a cementitious pulp the steps which comprise forming a mass of said pulp into a layer of the desired thickness and directly as formed depositing said layer upon successive portions of a matrix having sustantially the surface contour of the finished sheet and compacting said layer upon said matrix.

Friction Facing Material. No. 2,011,915. Granted on August 20th to William R. Seigle, Mamarcneck, N. Y. Assignor to Johns-Manville Corporation. Application November 28, 1930. Serial No. 498,761.

Non-laminated slab or sheet material adapted for use as friction facings, such as brake lining comprising asbestos fibres intimately associated with coalesced rubber and a friction augmenting material.

Brake Lining. No. 2,012,259. Granted on August 27th to Harry B. Denman, Pontiac, Mich. Application December 16, 1932. Serial No. 647,701.

A homogeneous friction element free of fibrous material and containing as its essential ingredients an organic binder and a predetermining proportion of fine divided asbestine.

Method and Apparatus for Making Friction Linings. No. 2,012,306. Granted on August 27th to Donald W. Fether, Downey, Calif. Assigner to Emsco Asbestos Company, Downey, Calif. Application September 5, 1933. Serial No. 688,171.

A method of making woven friction linings that includes advancing upper and lower courses of warp yarns toward the weave point and incorporating in the lining a substance adapted to give the lining pre-determined frictional characteristics by applying said substance thru separate passages extending between the yarns of both of said courses.

Heat Insulation. No. 2,012,617. Granted on August 27th to Carl Georg Munters, Stockholm, Sweden. Application February 26th, 1932. Serial No. 595,410. In Sweden March 3, 1931.

Method of producing a heat insulation consisting in mixing a substance such as zinc, cadmium or the like preferably in the form of powder, into a mass consisting, for instance of glass, heating the mixture to the melting temperature of the mass, lowering the pressure to permit said substance to evaporate, thereby forming numerous cells or pores in the mixture and cooling the mass under vacuum.

Packing Material. No. 2,012,711. Granted on August 27th to Chas. K. Dillingham, Plainfield, N. J. and Phillip D. Cannon, Philadelphia, assignors to Johns-Manville Corporation, New York, Application October 15, 1932. Serial No. 637,952.

A packing tape comprising longitudinally extending strips of woven fabric constituting the outer portion of the tape, and filler strands integrally woven with the said strips and securing them together in spaced relationship, some of the filler strands extending thru the space between the strips and being arranged in the said space as a plurality of series, containing each relatively closely spaced strands and being spaced from the next of the said series to provide a space adapted to receive fastening means of the type of a belt.

Machine for Making Friction Elements. No. 2,012,833. Granted on August 27th to Harry N. Smith, Detroit, Mich. Assignor to American Brakeblok Corporation, New York. Application November 10, 1932. Serial No. 641,951.

In a machine adapted for use in the manufacture of friction elements and the like, a pair of operating rolls mounted for engagement with friction elements passed therebetween and forming means co-operating with one of the rolls and prolonging the period of roll engagement with the elements.

THIS AND THAT

We again appeal to our readers to send us ridiculous statements on asbestos, as they find them in newspaper or magazine articles. Our collection is becoming quite interesting.

It is said that four asbestos suits are to be sent to the explorers of the crater of the Kenchevskaya Sopka volcano (Kamchatka, Siberia) for a second attempt at the exploration.

The explorers, headed by the geologist Kulakov narrowly escaped death when, on their first attempt, the volcano erupted.

It is in this way that asbestos promotes scientific investigation of various kinds.

Few of us are called to heroic daring, but many of us are called to meet the commonplace, and it is for this that we need courage.—Selected.

Don't forget to send us news of new products, new lines, or improvements in old products. It's advertising for you and it makes our pages more interesting to our readers.

The genius who is to invent a practical substitute for work has not yet been born, and in all probability never will be.—Selected.

Thru one source and another we are informed of various new firms being organized, general as insulation contractors, or distributors of asbestos products. Drop us a line giving name of the firm, names of men organizing it, and the line of work they intend to follow and we will make brief mention of it in the News of the Industry Columns. It will introduce these firms to the Asbestos Trade.

The most valuable result of an education is the ability to make yourself do the thing you ought to do, when it ought to be done, whether you like it or not.—Huxley.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Contentment

Let me do my work from day to day,
In field or forest, at the desk or loom,
In roaring market place or tranquil room;
Let me but find it in my heart to say,
When vagrant wishes beckon me astray,
"This is my work; my blessing, not my doom;
Of all who live, I am the one by whom
This work can best be done in the right way."

Then shall I see it not too great, nor small,
To suit my spirit and to prove my powers;
Then shall I cheerful greet the laboring hours,
And cheerful turn, when long shadows fall
At eventide, to play and love and rest,
Because I know for me my work is best.

—Henry van Dyke.